

dadurch gekennzeichnet, dass beim Betätigen des Stellgliedes (8) das Fördervolumen der Verdrängerpumpe (1) verringert wird..

9. Verfahren nach einem der vorhergehenden Ansprüche, dadurch gekennzeichnet, dass bei Ausfall der Steuerungskette oder eines einzelnen Bauteils die Verdrängerpumpe (1) auf maximalen Volumenstrom verstellt wird.

- () Please charge my Deposit Account No. 50-1030 in the amount of US \$ 130 to cover the above fees.
- () A check in the amount of US \$ is enclosed.
- () Applicant believes that this submission is timely and that no petition for an extension of time under 37 CFR 1.136(a) is required. Applicant, however, conditionally petitions for such an extension should same be necessary.
- (X) The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 50-1030. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

Paul Vincent

Dr. Paul Vincent, Reg. No. 37,461

August 31, 2004

Date

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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	SCHNEIDER, Willi) Examiner:
Application No.:	10/501,531) unknown
Filing Date:	July 16, 2004) Art Unit:
For:	METHOD FOR ADJUSTING A) unknown
	VOLUMETRIC FLOW-VARIABLE)
	POSITIVE DISPLACEMENT PUMP IN AN)
	INTERNAL COMBUSTION ENGINE)

Atty. Docket No.: 2104 0070US

August 31, 2004

MAIL STOP PCT
Commissioner for Patents
Alexandria, VA 22313
U.S.A.

INFORMATION DISCLOSURE STATEMENT

The undersigned herewith requests the Examiner to consider the art listed in the attached Disclosure Statement (PTO 1449) in examination of the above referenced U.S. patent application.

DE 692 14 774 T2 discloses a lubricant delivery system in which a displacement pump is driven (page 1, third paragraph) and liquid transported to a location of use (page 5, paragraph 5 to page 6 first paragraph). A characteristic value is determined using a sensor device to detect an operational state (page 6 first paragraph) and the characteristic value is transmitted to a control device (page 6 paragraphs 1 and 2 and page 7 paragraph 2). A comparison is made between the actual value and a desired value using an internal card of a lubricant controller (page 7, second paragraph). An adjustment signal is prepared (page 7 fourth paragraph and

page 8 first paragraph) and passed to an actuator (figures 6 and 8 steps P 9 to P 19). A volume flow of the displacement pump is thereby charged (figures 6 and 8 steps P 9 to P 19 as well as page 6, second paragraph). The steps are repeated until the actual value is equal to the desired value (figure 8 and 9, page 20 paragraph 4 to page 24, third paragraph). The rotational speed of the motor can constitute the characteristic value (page 11, third paragraph and page 12 first paragraph). This document further discloses a programmable card having predetermined programmable regions (page 8 third paragraph and figure 5 as well as page 8 third paragraph and figure 4).

DE 690 04 800 T2 discloses a regulated displacement pump for a lubricant circuit in a combustion engine which is suitable to avoid bypass losses (page 2 lines 13 to 22).

DE 38 40 909 A1 discloses a regulated displacement pump for a lubricant circuit in a combustion engine. An actuator is adjusted in opposition to a restoring force (column 2 lines 17 to 26).

DE 199 15 738 A1 discloses a regulated displacement pump for a lubricant circuit in a combustion engine.

DE 199 56 267 A1 discloses a regulator system for a fuel pump in which a displacement pump is driven (column 3 lines 5 to 13) and liquid is transported to a location of use (column 4 lines 11 to 21). A characteristic value is determined (column 3 lines 16 to 21 and column 4 lines 52 to 62) and transmitted to a controller (column 4 lines 45 to 62). A comparison is made between an actual value and a desired value (column 3 lines 21 to 43) and an actuating signal is prepared (column 3 lines 32 to 43). The actuating signal is transmitted to an actuator (column 6 lines 9 to 23) to change a volume flow of the displacement pump (column 6 line 56 to column 7 line 47 and figures 2A and 2B). The steps are repeated until the actual value equals

the desired value (column 7 lines 55 to 64). The characteristic value is given by a distributor strip intended pressure which is determined as a function of motor load and speed (column 4 lines 52 to 57).

This submittal is being made under 37 CFR 1.97 (b)(2). No fee is due. If any fees are necessary, please charge same to Account No. 50-1030.

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August 31, 2004

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Enclosures:

PTO-Form 1449 (1 page)

References which are not US Patents or Publications

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

Application Number	10/501,531
Filing Date	July 16, 2004
First Named Inventor	SCHNEIDER, Willi
Group Art Unit	
Examiner Name	

Sheet 1 of 1

Attorney Docket Number 2104 0070US

U.S. PATENT DOCUMENTS

Examiner Initials	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines Where Relevant Passage or Relevant Figure Appear
		Number	Kind Code			

FOREIGN PATENT DOCUMENTS

Examiner Initials	Cite No.	Foreign Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear
		Office Number	Kind Code			
		DE	199 56 267	Nakagawa	05.31.2000	
		DE	199 15 738	BMW	10.12.2000	
		DE	38 40 909	Voigt	06.29.1989	
		DE	690 04 800	Stangroom	05.05.1994	
		DE	692 14 774	Hiroyuki	02.20.1997	

Examiner
SignatureDate
Considered